TRAINING HIGH SCHOOL TEACHERS FOR THE FORMATION OF RESEARCH-ORIENTED STUDENT’S PERSONALITY


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Abstract. The objective of our paper was to highlight the roles and responsibilities of research supervisors; to reveal the structure of training teachers for the formation of research-oriented student’s personality; to identify psychological and pedagogical features of didactic technology in developing the research potential of a personality; to characterize the system of experimental models underlying this technology.

Improving the preparation of students for research activities is extremely relevant at the present stage of socio-economic development. To ensure the effectiveness of developing research-oriented personality of a future professional is possible due to the optimization of teacher training system. It includes important scientific and practical tasks such as ensuring the scientific and creative worldview of an individual and their ability to introduce the latest achievements in science, as well as to develop and implement innovative technologies, to contribute to the accumulation of the spiritual, cultural, scientific, technical, and economical potential of the state. An analysis of the recent studies that have begun to solve this issue allows for outlining the following directions of its study:
- developing the methods of creating scientific creativity of students;
- covering the means of training high school teachers for implementing person-centered approach;
- disclosing the functional and methodological aspects of professional culture formation in high school teachers.

Keywords: Teacher; High School; Research Orientation; Student.

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The objective of our paper was to highlight the roles and responsibilities of research supervisors; to reveal the structure of training teachers for the formation of research-oriented student’s personality; to identify psychological and pedagogical features of didactic technology in developing the research potential of a personality; to characterize the system of experimental models underlying this technology.

The three key components of research orientation are motivational, activity-procedural, and convincing-volitional one. The motivational component involves emotions, aspirations, needs, interests, etc.; the activity-procedural component includes readiness and attitude; the convincing-volitional component involves values, beliefs, worldview [6].

Students’ research activity is a creative study of reality using the scientific methods to receive subjective or objective information, to enrich their professional knowledge, to develop skills in order to become a researcher.

Training teachers for the formation of research-oriented student’s personality included two cycles of scientific and methodological seminars [3].

The first cycle provided for familiarizing teachers with psychological and pedagogical foundations of research orientation, its structural characteristics, as well as the roles and responsibilities of research supervisors in the process of its developing.

The main research supervisors’ responsibilities involve diagnosing students’ strengths and weaknesses; constructing and designing research activities; correcting and managing the research process; prognosing the research outcomes. A diagnostic involves the analysis of the level of developing the emotional, motivational, intellectual spheres of a student’s personality, their creative and research skills, and the mastery of search
techniques. Constructing and designing research activities allows for creating individual strategies for the development of a research-oriented personality, as well as modifying and designing research and creative means optimal for each student. Correcting and managing the research process involves determining the schedule, plan, and goals of the students’ research project, as well as checking the intermediate and final results [1].

Research supervisors provide students with a thorough explanation of any scientific or theoretical problem arising when doing research, monitor the compliance of text design with modern requirements, regulate the research process (increase or decrease the number of research tasks, expand or contract the amount of educational materials needed for carrying out research) in accordance with the individual pace of developing research-oriented personality [4].

The prognostic role means determining the prospects for the formation of a teacher as a researcher, putting forward the research tasks specifically influencing the further development of a certain component. Research supervisors pay special attention to the formation of self-introspection and self-regulation skills, creative self-regulation skills. They strive to ensure that creative self-realization will be a priority in ensuring complete independence of research in professional activity after graduation.

The second cycle was aimed at research supervisors mastering the roles and responsibilities mentioned above while training them for the implementation of didactic technology for the development of research-oriented student’s personality.

Psychological and pedagogical prerequisites for didactic technology functioning in the teaching-learning process were as follows:
- providing each student with an individual research activity mode;
- using the types of research activities contributing to the comprehensive spiritual, cultural, intellectual, and professional development of students;
- holistic and systemic development of the theoretical, practical procedural, motivational, and ideological components of personality potential;
- implementing long-term prospective studies that cover academic disciplines of several cycles and provide for multidimensional approach to studying a particular problem;
- agreement between the experimental methods, their mutual impact on the formation of student research orientation.

According to these prerequisites, didactic technology was based on the system of experimental models, including the model of creative integrated blocks of research activity [9]. The algorithm for developing a creative integrated block was as follows: learning material reception → its modification → new information creation.

Receptive tasks include reproductive activity when studying the material, first acquaintance with information to be researched. At this stage, students are offered an indicative plan of research activities. Performance-modification tasks are aimed at analyzing the material studied, searching for new information needed to make some modifications.

These tasks contribute, firstly, to the accumulation of scientific and theoretical knowledge, and, secondly, to the development of personality skills such as working with a bibliography; analyzing primary sources; comparing scientific ideas, approaches, concepts; classifying, systematizing, and generalizing theoretical knowledge acquired. Creative tasks are aimed at creating new information, original approaches to solving scientific problems. They are aimed at mastering skills that will be fundamentally important for effective future macro research, including proposing innovative ideas; applying knowledge of related academic disciplines; transferring knowledge and skills to new situations; characterizing a new, previously unknown quality; developing the methodology for pedagogical formative experiment; creating an experimental model of didactic measures [5].

The application of creative integrated blocks activates all the roles and responsibilities of research supervisors; moreover, this model provides for their step-by-step mastery. Thus, to determine the level and the number of research tasks, the teacher has to carry out a preliminary diagnosis of the personality; according to this diagnosis, they have to develop an integrated creative block that activates current and prospective development of a certain component of research orientation.

The experimental model of ‘creative precedents’ involves introducing more complex research tasks at the initial stage of study. They are professionally oriented and aimed at achieving an objectively significant research result. The model of ‘creative precedents’ offers students the opportunity to feel themselves as a teacher-researcher; to independently discover the methods and means of research; to identify their own level of developing research-oriented components. This model creates cognitive and intellectual motivation for research activity, allows for demonstrating students the specifics of the pedagogical work.

The ‘prospective search’ model is aimed at carrying out long-term research on a certain problem throughout the whole period of high school study. During the first year of study, the teacher introduces a certain problem the investigation of which expands with student’s mastering new study material, thereby allowing the student to consider the problem from different perspectives (its content and functional specifications,
its origin and development, research perspectives).

The student is required to independently highlight the history of studying this problem, to analyze various scientific views of its content, functional role of grammatical category of determination, to select examples of the use of articles; to develop own exercises, diagnostic tests, visual aids to be used in the teaching-learning process, etc. This allows for comprehensive updating the entire system of professionally significant linguistic knowledge. With the expansion of the research context, the research mode gradually becomes more complex and research activities become increasingly generalized. The students show creative initiative, cognitive independence, originality of the research approach [7].

Experimental models of ‘creative precedents’ and ‘prospective search’ encourage the teacher to regulate the mode of research activity for each student and to choose its certain stages according to their individual creative capabilities. Individual consultations aimed at ensuring the continuity of diagnosis and correction of the components of the research potential of the individual become increasingly valued.

Thus, the introduction of didactic technology, which is based on the system of experimental models of integrated creative blocks, ‘creative precedents’, and ‘prospective search’ ensuring the mastery of diagnostic, constructing and designing, correcting and managing, and prognosing roles of teachers, promotes the optimization of their training for the formation of research-oriented student’s personality. Prospects for further research in this direction are to determine the regulatory role of the teacher in ensuring the effectiveness of students’ research and creative work at different stages of higher education.

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